



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/842,778	04/27/2001	Atsushi Ito	1945-347	3837

6449 7590 01/15/2004

ROTHWELL, FIGG, ERNST & MANBECK, P.C.
1425 K STREET, N.W.
SUITE 800
WASHINGTON, DC 20005

EXAMINER

MACCHIAROLO, PETER J

ART UNIT PAPER NUMBER

2875

DATE MAILED: 01/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/842,778

Applicant(s)

ITO ET AL.

Examiner

Peter J Macchiarolo

Art Unit

2875

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 7-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 7-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 1203.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. The Request for Continued Examination filed on December 29, 2003 is acceptable. An Office Action on the pending claims follows. Claims 7-9 are not allowable as explained below.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the front panel having a plurality of electrodes as recited in claim 7 must be shown or the feature(s) canceled from the claim(s).
3. Further, the Examiner appreciates that Applicant's resultant display panel is shown in the figures, however, the claimed method steps (i.e. providing a back panel with display cells formed by coating, disposing a front panel, coating resin material over the front panel, pressing a molding tool against the resin, and separating the molding tool from the front surface of the resin) are not shown. Therefore, the method as claimed must be shown or the features canceled from the claim.
4. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance. No new matter should be entered.

Claim Objections

5. Claim 7 is objected to because of the following informalities:

Art Unit: 2875

6. The claim recites, "pressing a molding tool against the front surface of said resin lens layer," however, there is not proper antecedent basis for a front surface of the resin lens layer. The Examiner is interpreting this limitation as, "pressing a molding tool against a front surface of said resin lens layer."

7. Further, the limitation, "providing a back panel have a plurality of display cells," is interpreted as, "providing a back panel having a plurality of display cells." Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oshawa et al (USPN 5,939,826; "Oshawa") in view of Haraga et al (USPN 5,126,620; "Haraga").

9. In regards to claim 7, Oshawa discloses in figure 2, providing a back panel (1) having a plurality of display cells (S) each formed by coating on recessed portions of the back panel fluorescent material (7) emitting red, green or blue light, the recessed portions being arranged in an array, disposing a front panel (3) on a front surface side of the back panel so as to cover the recessed portions, the front panel having a plurality of electrodes (21) each electrode corresponding to a respective display cell and causing the respective display cell to emit light through electric discharge, coating a material (6) over the front panel formed with a plurality of

lenses, each of which condense light from a display cell (S) to the front side of the display panel¹. Oshawa further discloses in figure 1 that the luminous portion comprises a plurality of display cells disposed in a matrix from, and each of the display cells emit light.

10. Oshawa is silent to the material being a resin material including red, green, and blue resins corresponding to red, green, and blue color regions of the back panel, and is also silent to how the lenses are made.

11. However, Haraga discloses that condensing lenses can be press molded (compression molding) from a resin including a pigment corresponding to the luminous layers they cover, and this configuration enables the lenses to operate as filters, thereby increasing the contrast between the states of full-emission and non-emission in each of the pixels².

12. One would be motivated to manufacture Haraga's colored lenses on Oshawa's PDP for a variety of reasons. For one example, Oshawa teaches that the front panel (6) can be attached after manufacturing processes are completed, thereby bypassing harmful heating processes. Therefore, if Haraga's colored resin is coated over Oshawa's completed PDP on the 1st face panel (3), and the resin is then molded via compression, the resultant filters and lenses will not be subjected to harmful heating processes. For another example, since Haraga's lenses act as filters, there is no need to separately manufacture Oshawa's filters (13) thereby reducing manufacturing time. For another example, material availability is a leading motivating factor to manufacture Haraga's colored lenses on Oshawa's PDP.

¹ Oshawa, col. 3, ll. 54-63.

² Haraga, col. 10 line 50 to col. 11, line 31.

Art Unit: 2875

13. Therefore, in view of the above discussion, it would have been obvious to one having ordinary skill in the art at the time the invention was made to construct Oshawa's PDP using Haraga's lenses and lens forming method.

14. The Examiner notes that in the First Office Action at paper number 4, page 4, paragraph 10 explains the relationship between compression molding and Applicant's method of manufacture.

Conclusion

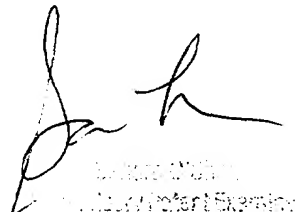
15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter J Macchiarolo whose telephone number is (571) 272-2375. The examiner can normally be reached on 8:00 - 4:30, M-F.

17. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on (571) 272-2378. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

18. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

pjm



Peter J Macchiarolo
Patent Examiner
Art Unit 2875